

IN THE CLAIMS:

Please cancel claims 2-4, 9-10, 14-16, and 20-22, and amend the remaining claims as follows:

1. (Currently Amended) A method of instructing a computer program to self-optimize, said method comprising:

inputting commands a selection command that selects one function from a list of pre-selected functions into said computer program, wherein each function from said list of pre-selected functions is associated with a reward; and

allowing a learning protocol in said computer program to track and reward said one function that is selected and to determine an approximate optimal policy of choice of operation of said computer program based on at least said commands selection command.

2-4. (Canceled).

5. (Currently Amended) The method of claim [[3]] 1, wherein said commands comprise further comprising inputting a rule command operable for instructing that establishes a rule for said computer program of on how to make determine said approximate optimal choice of operation.

6. (Currently Amended) The method of claim [[3]] 1, wherein said commands comprise further comprising inputting a reward command operable for instructing that provides a reward.

at a point of choice in said computer program, for said one function selected by said selection command, which of said operational choices results in said approximate optimal choice for self-optimizing said operation of the computer program.

7. (Currently Amended) A method of autonomically optimizing a computer program, said method comprising:

specifying at least one choice point of choice in said computer program;

defining a set of alternate choices at each choice point of choice, wherein said set of alternate choices include operational choices comprising comprises;

inputting a selection command that selects one function from a list of pre-selected functions into said computer program wherein each function from said list of pre-selected functions is associated with a reward; and

allowing a learning protocol in said computer program to track and reward said one function that is selected to determine an approximate optimal operation of said computer program based on said selection command; and

setting at least one feedback point for each choice point of choice.

8. (Currently Amended) The method of claim 7, further comprising allowing a learning protocol in said computer program to determine an approximate optimal policy of operation of said computer program based on said specifying, defining, and setting.

9-10. (Cancelled).

11. (Currently Amended) The method of claim [[9]] 8, wherein said set of alternate choices include operational choices, further comprising comprises:

inputting a rule command into said computer program, wherein said rule command is operable for instructing said computer program of establishes a rule on how to make determine said approximate optimal choice operation.

12. (Currently Amended) The method of claim 9 8, wherein said set of alternate choices include operational choices, and wherein said method further comprising comprises:

inputting a reward command into said computer program, wherein said reward command is operable for instructing provides reward in said computer program, which of said operational choices results in said approximate optimal choice for optimizing said operation of the computer program.

13. (Currently Amended) A program storage device readable by computer, tangibly embodying a program of instructions executable by said computer to perform a method of instructing a computer program to self-optimize, said method comprising:

inputting commands a selection command that selects one function from a list of pre-selected functions into said computer program, wherein each function from said list of pre-selected functions is associated with a reward; and

allowing a learning protocol in said computer program to track and reward said one function that is selected and to determine an approximate optimal policy of choice of operation of said computer program based on at least said commands selection command.

14-16. (Cancelled).

17. (Currently Amended) The program storage device of claim 45 13, wherein said commands comprise further comprising inputting a rule command operable for instructing that establishes a rule for said computer program of on how to make determine said approximate optimal choice of operation.

18. (Currently Amended) The program storage device of claim 45 13, wherein said commands comprise further comprising inputting a reward command operable for instructing that provides a reward, at a point of choice in said computer program, for said one function selected by said selection command, which of said operational choices results in said approximate optimal choice for optimizing said operation of the computer program.

19. (Currently Amended) A computer system for instructing a that executes an optimizing computer program to self optimize comprising:

a compiler operable for inputting commands that inputs a selection command, said selection command selecting one function from a list of pre-selected functions into said computer program, wherein each function from said list of pre-selected functions is associated with a reward; and

a software module operable for allowing that includes a learning protocol in said computer program to track and reward said one function that is selected and determine an

approximate optimal ~~policy~~ of operation of said computer program based on at least said ~~commands~~ selection command.

20-22. (Canceled).

23. (Currently Amended) The system of claim 24 19, wherein said ~~commands~~ comprise ~~compiler further inputs~~ a rule command ~~operable for instructing that establishes a rule for~~ said computer program ~~of on~~ how to make determine said approximate optimal choice of operation.

24. (Currently Amended) The system of claim 24 19, wherein said ~~commands~~ comprise ~~compiler further inputs~~ a reward command ~~operable for instructing that provides a reward, at a point of choice in~~ said computer program, ~~for said one function selected by said selection command, which of said operational choices~~ results in said approximate optimal choice for optimizing said ~~operation of the~~ computer program.

25. (Currently Amended) A computer system ~~of autonomically that executes an~~ optimizing [[a]] computer program, comprising:

means for specifying at least one ~~choice~~ point of choice in said computer program;

means for defining a set of alternate choices at each ~~choice~~ point of choice, wherein said set of alternate choices include operational choices, comprising comprises:

means for inputting a selection command that selects one function from a list of pre-selected functions into said computer program, wherein each function from said list of pre-selected functions is associated with a reward; and

allowing a learning protocol in said computer program to track and reward said one function that is selected to determine an approximate optimal operation of said computer program based on said selection command; and

means for setting at least one feedback point for each ~~choice~~ point of choice.